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The Largest Non-Financial Multinational Enterprises in the World and Those in Developing and Transition Economies

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Abstract:

Purpose: *The purpose of the article is to present selected manifestations of the process of approaching the scale of foreign investment activity of entities from developing countries to entities from developed countries, as well as the potential of the largest investors from these two groups of countries.*
Design/Methodology/Approach: *The study is based on information obtained from the United Nations Conference on Trade and Development and Brand Finance's statistical sources. The study uses statistical and economic analysis, comparison, analogies, synthesis, and the method of measuring and aggregating data and tabular method. The choice of economic parameters presented below and the related parameter formulas, as proposed by the authors, are based on the preliminary query of the scientific literature on the subject.*
Findings: *The FDI outward stock at the end of the second decade of the 21st century show a clear increase in the share of developing countries, however, the distance between them about developed countries is still considerable. The convergence is evidenced, e.g., by the growing share of MNEs in both groups representing highly technologically advanced industries, although in the 100 largest MNEs from developing and transition economies, it is clearly lower. At the same time, significant differences in the structure by countries both in FDI outward stock and in the largest MNEs of the presented groups persist or intensify.*
Practical Implications: *The presented results prove that companies from developing and transition economies find an effective tool for building international competitiveness by making foreign direct investments. Their experiences may serve as an example and encouragement for local companies to undertake an international expansion through capital allocation.*
Originality/Value: *The article presents the process of approaching FDI outward stock from developed and developing and transition economies in the past thirty years. The inference basis was not only data specifying changes in the share of both groups of countries in the value of FDI outward stock, but also data describing the largest MNEs worldwide and MNEs from developing and transition economies. This approach has the value of originality.*

Keywords: *Foreign Direct Investment, Multinational enterprises (MNEs), developing and transition economies.*

JEL codes: *F21, F23.*

Paper Type: *Research paper.*

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1. Introduction

The past three decades have been a period in which capital, in search of the best investments, has penetrated the world to an incomparably greater degree than ever before. Foreign direct investment has become a tool to increase the effectiveness of capital and, at the same time, to increase the value of enterprises – investors. In contrast to the beginning of this period, when capital involvement in foreign direct investment from developing countries was negligible, it is now becoming more and more significant. Today it is safe to say that companies from this group of countries have recognized internationalization using capital as an effective way of achieving success in the international arena and are engaging in it more and more boldly (Karaszewski *et al.,* 2014). The foreign expansion of enterprises from developing countries is becoming an increasingly important factor in building their international competitiveness and achieving success in the global market. This is because this expansion, similarly to international enterprises from developed countries, enables developing countries not only to gain more from the competitive advantages they already have but also to build new ones based on the use of the material and intangible resources scattered around the world, including knowledge, skills, and sources of information, not to mention the wealth of cultural diversity.

Growing investment activity of enterprises from developing countries, its conditions, and its effects constitute an important research area concerning a phenomenon crucial for the world economy and business entities. The article aims to present selected manifestations of the process of approaching the scale of foreign investment activity of entities from developing countries to entities from developed countries and the potential of the largest investors from these two groups of countries.

2. Literature Review

The development of corporations from developing countries is an increasingly important aspect of the current wave of globalization, which has important implications for understanding the world economy, global business, and the international political economy (Goldstein, 2009, p. 137). Research on the internationalization of multinational enterprises from developing countries (DC MNEs) in FDI can be traced back to the 1970s. This period is described as the first wave of development of these enterprises on an international scale. It was initiated by researchers arguing that DC MNEs have specific features that differentiate them from "conventional" MNEs from developed countries in terms of ownership advantages, directions of geographical expansion, and the mode of overseas activity (Lecraw, 1977; Kumar and McLeod, 1981; Lall, 1983; Khan, 1987). In the first wave, DC MNEs made foreign investments in neighboring countries and countries with a similar or lower development stage (Heenan and Keegan, 1979; Wells, 1983; Yeung, 1994; Carstina *et al.,* 2015). The choice was dictated, among others, by little experience in conducting foreign activity (Narula, 2010).

According to Dunning *et al.* (1998), the second wave of FDI-making activity of DC MNEs began in the early 1990s, distinct from the first wave. The second wave of multinational enterprises came from countries at a higher industrial development stage, where industrial sectors requiring significant capital and knowledge-intensive development had developed. DC MNEs from these countries undertook foreign investments related to the search for natural resources in less developed countries and foreign investments aimed at the market in more developed countries (Thalassinos, 2007). They became more global and became more like "conventional" MNEs from developed countries (Narula, 2010). After 1990, companies from post-communist transition economies (PTEs) joined the international expansion in FDI. From 1994 to 2000 among the PTEs, the biggest OFDI stock was first held by enterprises from Russia, and later Hungary, Poland, Croatia, the Czech Republic, and Slovenia (Andreff and Andreff, 2017, p. 449).

The second half of the new millennium's first decade saw an increase in publications on MNEs from developing countries. Some researchers considered the observed changes as the basis for formulating the thesis that there was a third wave of DC MNEs development, different from the previous two. This was especially true of companies from the BRICS countries (Gammeltoft, 2008). A different view is presented by Narula (2010), who claims that the activity of DC MNEs at this time was a natural extension of the second wave. The author argued that the third wave could be characterized as an intermediate step in the evolution of multinational enterprises' activity between the first wave of DC MNEs and "conventional" MNEs. Ramamurti (2008) made a similar case. He pointed out that the DC MNEs have moved from being infant MNEs to adolescent MNEs in the past 30 years and are converging upon the 'mature' MNE rapidly (Ramamurti, 2008).

When discussing the investment activity of DC MNEs, it is necessary to point out a certain specificity of these enterprises. State-owned enterprises (SOEs) play an important role in international expansion, especially from large emerging countries like China (Lin, 2010; Ramasamy *et al.*, 2012, Dong *et al.*, 2014, Hu and Cui, 2014; Chen *et al.*, 2015, Liang *et al.*, 2015, Wang *et al*., 2017). As part of their economic and industrial policy, some developing countries took care of state-owned enterprises, providing them with protection against competitors and subsidizing their foreign expansion. Although various agreements under the World Trade Organization (WTO) led to the liquidation or weakening of this support, it influenced these enterprises' foreign expansion, which was reflected in foreign investments made by developing countries (Narula, 2010).

Materials presented later in this article illustrating, despite persistent, significant differences, the convergence of MNEs from developing countries and MNEs from developed countries, provide arguments confirming the validity of Narula's (2010) arguments.

3. Research Methodology

The study is based on information obtained from the statistical sources published by United Nations Conference on Trade and Development and Brand Finance. The study covers the years 2000-2019. The information includes the following: 1) FDI outward stock, by developed and developing and transition economies 1990-2019, 2) selected indicators of MNEs 1990-2019, 3) internationalization statistic of 100 largest non-financial MNEs worldwide and from developing and transition economies, 4) relations employment/assets, employment/sales 100 largest MNEs worldwide and 100 largest MNEs from developing and transition economies, 5) industry structure of the 100 largest MNEs worldwide and 100 largest MNEs from developing and transition economies, well as 6) the most valuable brands in the world. The study uses statistical and economic analysis, comparison, analogies, synthesis, and the method of measuring and aggregating data and tabular method. The choice of economic parameters presented below and the related parameter formulas, as proposed by the authors, are based on the preliminary query of the scientific literature on the subject, the available statistical data, and the authors' research experience and own conclusions.

4. Discussion of Results

Entities from developed countries invariably dominate in investing capital abroad in the form of foreign direct investments. This is reflected in the FDI outward stock value for these countries. At the end of 2019, their share was 75.9%. However, it is impossible not to notice the clearly growing involvement of corporations from developing countries. Over the past 30 years, it has increased more than 60 times, which meant that at the end of 2019, the share of these countries in the global FDI was over 24%. The dynamics of this involvement also grew. In 2000, there was an increase by 3.4 percentage points about 1990, in 2010 by 7 percentage points compared to 2000, and in 2019 by 7.5 percentage points compared to 2010 (Table 1).

Table 1. *FDI outward stock, by developed and developing and transition economies 1990-2019 (billions of dollars and %)*

	1990	2000	2010	2015	2019
World	2,255	7,409	20,465	26,274	34,578
Developed economies	2,115	6,699	17,078	20,729	26,233
Developing and transition economies	140	710	3,387	5,545	8,345
Developing as % of total	6.2	9.6	16.6	21.1	24.1

Source: *Compiled by the authors on the basis of UNCTAD 2020, Annex table 4.*

This period was characterized by significant differences in structural changes by FDI outward stock countries in both groups presented. There was a relative stabilization of the structure of the discussed investments in developed economies. However, it is worth noting that with the U.S. share in FDI downward stock developed economies falling from 34.6% in 1990 to 24.9% in 2019, and similarly by Japan from 9.6% to 6.9%, the share of developed European countries increased from 49.8% to 54.6%,

including the European Union from 46.2% to 47.9%. In contrast, there was a far-reaching concentration of FDI outward stock in the group of countries classified as having developed and transition economies.

In 1990, Asia's share was 47.8%, South America 35%, Africa 15.1%, and in 2019 Asia – 82.1%, South America 6.1%, Africa 3.4%, respectively. The change in China's share, including Hong Kong and Taiwan, is spectacular here. Their total share in FDI outward stock in developing and transition economies amounted to slightly over 33% in 1990 (China 3.2%, Hong Kong 8.4%, Taiwan 21.6%), and almost 51% in 2019 (China 25.1%, Hong Kong 21.5%, Taiwan 4.3%). They were joined by Singapore (13.3%) and the Republic of Korea (5.3%). Other larger players from the group of developing and transition economies do not play such a significant role: Russia (4.6%), Mexico (2.8%), Brazil (2.7%), 2.1% India (2.1%), and with 1.4% share in Malaysia (compiled by the authors on the basic of UNCTAD 2020, Annex Table 4).

Thus, in developing and transition economies, there is also a clear polarization of FDI outward stock towards Asia. Globally, FDI is mainly the result of the investment activity of multinational enterprises (MNEs). The result of the growing capital involvement of MNEs abroad was the increase in the number of foreign affiliates owned by them (in 1990 there were 150,000, in 2000 - 689,520, and 2010 - 892,114; UNCTAD, 1992, Jaworek and Kuzel, 2015) and at the same time a significant increase in the potential of these entities. It should be noted that compared to 1990, the estimates for 2019 indicate an increase of (1) almost 18.6 times their total assets, (2) more than 4.5 times the value of sales, (3) and more than 6 times the value added (product). Interestingly, these changes took place with an almost threefold increase in employment (Table 2). This points to the decreasing work-consumption of direct investment entities of the largest MNEs globally, which is the result of progressing scientific and technical advancements and the IT revolution, which has become one of the most spectacular phenomena of the period under discussion. Although the total number of these entities is not given at present, it is probably in the range of 1-1.5 million.

The total value of foreign assets of the 100 largest of them, according to the value of these assets, in 2019 accounted for 27.5% of the global FDI outward stock, which is clearly less compared to 1990, when this share was 53.2%. Nevertheless, a comparison of the data showing the value of assets, sales, and the number of employees of MNEs, which were included in the 100 largest worldwide lists in 1990 and 2019, reveals a huge increase. During these thirty years, they recorded an almost 8-fold increase in assets abroad with a slightly over 5-fold increase in the value of total assets and almost a 4-fold increase in sales abroad (similarly in total sales). The lack of precise data makes it impossible to assess the scale of employment growth abroad. It was probably lower than the scale of growth of both foreign assets and foreign sales. The total number of employees increased by 53.1%. The transnationality index's numerical value in 2019 was two times higher than in 1990 (Table 3).

Table 2. *Selected indicators of MNEs 1990-2019 (value at current prices, billions of dollars)*

Item	Years			
	1990	2017	2018[a]	2019[a]
Total assets of foreign affiliates	6,022	101,249	104,367	112,111
Sales of foreign affiliates	6,929	29,844	30,690	31,288
Value added (product) of foreign affiliates	1,297	7,086	7,365	8,000
Employment by foreign affiliates (thousands)	27,729	77,543	80,028	82,360

Note: *Not included in this table is the value of worldwide sales by foreign affiliates associated with their parent firms through non-equity relationships and the parent firms' sales. Worldwide sales, gross product, total assets, exports, and employment of foreign affiliates are estimated by extrapolating the worldwide data of foreign affiliates of MNEs from Australia, Austria, Belgium, Canada, Czechia, Finland, France, Germany, Greece, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Portugal, Slovenia, Sweden, and the United States for sales; those from Czechia, France, Israel, Japan, Portugal, Slovenia, Sweden, and the United States for value-added (product); those from the United Kingdom and the United States for assets; those from Czechia, Japan, Portugal, Slovenia, Sweden and the United States for exports; and those from Australia, Austria, Belgium, Canada, Czechia, Finland, France, Germany, Italy, Japan, Latvia, Lithuania, Luxembourg, Macao (China), Portugal, Slovenia, Sweden, Switzerland, and the United States for employment, based on three-year average shares of those countries in worldwide outward FDI stock.*

[a] *Data for 2018 and 2019 are estimated based on a fixed-effects panel regression of each variable against outward stock measured in book value and a lagged dependent variable for the period 1980–2017.*

Source: *UNCTAD, 2020, p. 22.*

Table 3. *Internationalization statistic of 100 largest non-financial MNEs worldwide and from developing and transition economies (billions of dollars, thousands of employees and %)*

Variable	**100 largest MNEs worldwide**					**100 largest MNEs from developing and transition economies**			
	1990	2005	2010	2018	2019[b]	2005[c]	2010	2017	2018
Assets									
Foreign	1,209[a]	4,732	7,495	9,239	9,520	471	1,068	2,117	2,623
Total	3,199	8,683	11,912	15,483	16,880	1,441	3,710	7,462	8,389
Sales									
Foreign	1,502	3,742	4,870	5,579	5,930	477	1,113	1,871	2,675
Total	3,107	6,623	7,590	9,348	10,027	1,102	2,424	4,306	5,719
Employment									
Foreign	.	8,025	8,684	9,563	9,411	1,920	3,726	4,557	4,958
Total	12,217	15,107	15,186	17,469	18,708	4,884	8,837	12,916	13,211
Average index of transnationality	31.5	53.1	61.3	64.5	62.4	39.3	50.9	50.0	49.2

Note:[a] *Estimates for foreign assets were used where the data were missing;* [b] *Preliminary results;* [c] *Preliminary date of the 100 largest MNEs from developing concern 2005 (in earlier reports UNCTAD presented data of the 50 largest MNEs from developing countries).*

Source: *Compiled by the authors based on UNCTAD 1993, pp. 26, 27; UNCTAD 2007, p. 25; UNCTA, 2012, p. 25; UNCTAD, 2020, Annex table 19, 20.*

A simple comparison of the presented data shows the dynamically growing capital internationalization of the world's largest MNEs, which was probably an important factor in building their international competitiveness.

The lack of data for the first half of the analyzed period makes it impossible to present the changes that took place at that time in the group of the 100 largest MNEs from developing and transition economies. However, in less than fifteen years, from 2005 to 2018, the value of their foreign assets increased 5.6 times, and total assets 5.8 times (in the group of 100 largest MNEs worldwide, an increase was recorded by 95.2% and 78.3%, respectively). The value of sales abroad increased 5.6 times, while the total sales increased 5.2 times (in the group of 100 largest MNEs worldwide, they increased by 49.1% and 41.1%, respectively). The number of people employed abroad increased by 2.6. times at a 2.7-fold increase in the total number of employees (in the group of 100 largest MNEs worldwide, an increase was recorded by 19.2% and 15.6%, respectively). The faster-growing value of assets and sales and the number of employees in the largest MNEs from developing and transition economies resulted in the fact that MNEs in this group narrowed the gap between them and the largest MNEs worldwide. In 2005, the total value of assets abroad of the 100 largest MNEs from developing and transition economies accounted for only 10% of the value of foreign assets of the 100 largest MNEs worldwide, and the value of total assets was only 16.6%. After almost 15 years, although the difference remained very high, it has narrowed significantly. In 2018, the 100 largest MNEs from developing and transition economies had foreign assets accounting for 28.4% and total assets equivalent to 54.1% of the respective asset values of the hundred largest MNEs worldwide. The distance between the two presented groups of the largest MNEs in the world narrowed even more in terms of sales value and employee number.

The 100 largest MNEs worldwide maintained a significantly higher average index of transnationality than the 100 largest MNEs from developing and transition economies (Table 3). From 2005 to 2018, both groups recorded an increase in the value of this index. However, it should be noted that the scale of this increase, in contrast to the changes in the parameters presented earlier, was similar – 23.2% in the group of 100 largest MNEs worldwide, and only slightly higher (25.2%) in the second group. Data characterizing assets, sales, and the number of employees of the 100 largest MNEs worldwide and the 100 largest MNEs from developing and transition economies provided the basis for identifying numerical differences in the employment/assets and employment/sales relations in both presented groups of the largest MNEs, and above all their chances in the period 2005-2018. It is not difficult to notice that throughout the 30-year period, there was a decrease in the number of employees per 1 million USD in the value of assets and per 1 million USD in the value of sales in the 100 largest MNEs worldwide group (Table 4). Similar changes occurred about the 100 largest MNEs from developing and transition economies in 2005-2018. Note that the numerical values of employment total/assets, employment total/sales in the group of 100 largest MNEs worldwide were slightly higher than employment foreign/assets foreign, employment foreign/sales foreign. The employment total/sales and employment foreign/sales foreign relations were similar in the group of 100 largest

MNEs from developing and transition economies. This confirms that, on the one hand, the creation of ownership advantages abroad requires the transfer of the latest technological solutions, and on the other, the investment decisions of the largest MNEs of both groups, the effect of which are acquisitions, are aimed at taking over the most technologically advanced entities.

Table 4. *Relations employment/assets, employment/sales 100 largest MNEs worldwide and 100 largest MNEs from developing and transition economies*[*]

Relation	100 largest MNEs worldwide					100 largest MNEs from developing and transition economies			
	1990	2005	2010	2018	2019	2005	2010	2017	2018
Employment/assets									
Foreign	.	1.70	1.16	1.04	0.99	4.08	3.49	2.15	1.89
Total	3.82	1.74	1.27	1.13	1.11	3.40	2.38	1.73	1.57
Employment/sales									
Foreign	.	2.14	1.78	1.71	1.59	4.03	3.35	2.44	1.85
Total	3.93	2.28	2.00	1.87	1.87	4.43	3.65	3.00	2.31

Note: *[*]number of employees per 1 million assets (sales).*
Source: *Compiled by the authors on the Table 3.*

It is interesting that although the values of the employment/assets and employment/sales relationships were higher in the 100 largest MNEs from developing and transition economies, with time, they were clearly closer to the group of 100 largest MNEs worldwide (Table 4).

Even though the UNCTAD ranking of the hundred largest MNEs in the world has changed from year to year, the countries where they had their headquarters have not changed much since 1990. In 2019, out of the hundred largest non-financial MNEs, 77 came from the Triad - the European Union, USA, and Japan. Even though the corporations in these countries have maintained their unquestionable dominance, it is impossible not to notice their decreasing number (from 88 in 1990 to 79 in 2019). Already in the last decade of the 20th century, corporations from developing countries appeared on the list. While in 1990 not a single enterprise based in a developing country was on the list, in 2000 there were five (Hutchison Whampoa from Hong Kong – 14th place, Cemex from Brazil - 76th place, LG Electronics from South Korea – 92nd place, Petróleos de Venezuela - 97th place, and New World Development from Hong Kong - 99th place; UNCTAD, 2002, pp. 86-88), already 10 in 2018, and in 2019 this number increased to 14, of which 9 were in China (6 in 2018). Of the remaining five, one representative came from each: Saudi Arabia, Hong Kong, South Korea, Malaysia, and Taiwan (Province of China). In 2019, the largest number among the hundred largest MNEs in the world was retained by US corporations - 20, but it was also clearly decreasing (from 28 in 1990 to 23 in 2000). The number of Japanese corporations decreased likewise. In 2019, the country was represented by 8 entities (12 in 1990, 16 in 2000, and 10 in 2018). The number of corporations from the European Union has not changed: 49 in 1990 and 2019. In the last year of the analyzed period, 15 came from France, 13 from Great Britain, 11 from Germany, 3 each from Spain and Italy, and one from Belgium, Ireland, Luxembourg, and the Netherlands. It is worth noting that among the main representatives of the European Union, an

increase in the number of the largest corporations was recorded by France – from 14 in 1990 to 15 in 2019 and Germany, respectively, from 9 to 11, while the number of corporations from Great Britain remained unchanged – 13. The 2019 list did not include corporations from Sweden, of which there were as many as 5 in 1990 (UNCTAD 1993, pp. 26-27; UNCTAD 2002, p. 93; UNCTAD 2019, Tab. No. 19; UNCTAD 2020, Tab. No. 19).

Likewise, relatively small changes were recorded on the list of 100 largest MNEs from developing and transition economies. One sees a clear dominance of East and South-East Asia. In 2005, as many as 75 companies came from this part of Asia, and in 2018, after entities from the Philippines and Thailand left the list, 73 remained. The number of Indian companies increased from 2 in 2005 to 5 in 2018. On the other hand, 7 entities from West Asia appeared on the 2018 list (3 from the United Arab Emirates, two from Saudi Arabia, and one each from Qatar and Kuwait) and 3 companies from the Russian Federation. On the other hand, the number of MNEs from South Africa decreased from 10 in 2005 to 4 in 2018.

Despite an increase in the number of countries with representatives on the list of the 100 largest MNEs globally in the described period (14 in 1990, and 20 thirty years later), there were practically no significant differences among the leaders. Although this further confirms the continued domination of the largest "players" on the global market, there is a symptom of changes, heralded by the entry of several Asian countries, led by China, which occupies the fifth place according to the number of entities on the discussed list. It is impossible not to note that in the 1990 ranking, Asia was represented only by Japanese corporations, and after 30 years, China with the above-mentioned 9 entities was ahead of Japan (8 enterprises).

The structure of the largest MNEs in the world has changed over the past 30 years. In 1990, among 100 of them, only five industries had as many as 54 entities: petroleum refining (13), motor vehicles & parts (12), chemicals (12), electronics (9), and trading (8). Pharmaceuticals and food were represented by 5 MNEs, computers by 4, and industrial & farm equipment by 1 (UNCTAD, 1993, p. 27).

In 2005, of the top 100 MNEs, 58 belonged to 6 industries: motor vehicles (11), petroleum (10), electrical and electronic equipment (10), pharmaceuticals (9), telecommunications (9), and electricity, gas, and water services (9). Of the 100 largest MNEs from developing economies, 51 belonged to 6 industries[3]: electrical and electronic equipment (10), computer and related activities (10), petroleum (10) food and beverages (8), transportation and storage (7), telecommunications (6) (UNCTAD, 2007, pp. 25, 229-234).

[3]*In the discussed period, the names of industries and the methodology of classifying entities in each of them changed. Currently, UNCTAD indicates the basic industries MNEs uses the Standard Industrial Classification as used by the United States Securities and Exchange Commission (SEC).*

In the following years, further changes took place, as a result of which the structure of the presented MNEs groups had slightly leaned towards a greater share of innovative industries (Table 5). Although significant in the group of the 100 largest MNEs from developing and transition economies, their share is significantly smaller than in the case of the 100 largest MNEs worldwide. However, the growth rate of foreign assets100 largest MNEs from developing and transition economies were driven by Chinese and Korean companies, mostly in the technology industry. The growing role of Huawei (China) in global telecommunication networks is reflected in its more than tripling of foreign assets during 2017-2018. Technology groups Tencent and Legend (both China) increased their foreign assets by about 50% each. LG Electronics (Republic of Korea) tripled its non-current assets in North America and Europe through various deals and projects, including the acquisition of ZKW (Austria). Similarly, the IT group SK Holding (Republic of Korea) also increased its foreign assets significantly following efforts to vertically integrate the chipmaking business of its subsidiary SK Hynix and gain market share, including a deal to buy a stake in Toshiba Memory (Japan) (UNCTAD, 2020, p. 24).

Interestingly, after reaching a peak in 2017 (15 companies), the number of tech and digital firms among the top 100 decreased to 13 in 2019. However, the share of tech and digital MNEs in the total foreign sales of the top 100 still increased over the same period, from less than 17% to more than 18%, and their share in foreign assets increased from 10% to 11%. It is important to note here that the trend towards stronger tech and digital entities in the top 100 thus continues. They included 5 emerging-market companies, 4 from China: Hon Hai (Taiwan Province of China), Tencent, Huawei, Legend Holding (China), and Samsung (Republic of Korea), The new entries from China were among the fastest companies to internationalize their operations and pushed the industry average up. (UNCTAD, 2020, p. 24).

Interestingly, not a single entity in the pharmaceutical industry has been included in the 100 largest MNEs from developing and transition economies. On the other hand, hotels and restaurants (3) and building materials (1) were represented, and they are no longer included in the 100 largest MNEs worldwide group (in 1990, each of these industries was represented in this group by three entities). It is also worth noting that in 2018 only one entity from the construction industry remained among the 100 largest MNEs worldwide, while in the group of the 100 largest MNEs from developing and transition economies, there were as many as 9. Generally, this group is still dominated by "heavy-industry," which is related to the significant representation of Chinese multinational enterprises (44), including state-owned ones (SO-MNEs), eight of which were classified in the extractive, seven utilities, and eight metals industries (UNCTAD, 2020, p. 25).

Table 5. *Industry structure of the 100 largest MNEs worldwide and 100 largest MNEs from developing and transition economies, 2018*

No	Industry	Number of entities	
		World	Developing and transition economies
1	Motor Vehicles	12	5
2	Pharmaceuticals	11	-
3	Electricity, gas and water	10	9
4	Petroleum Refining and Related Industries	8	3
5	Telecommunications	7	9
6	Mining, quarrying and petroleum	6	11
7	Computer and Data Processing	6	2
8	Chemicals and Allied Products	6	5
9	Food & beverages	5	8
10	Retail Trade	2	2
11	Industrial and Commercial Machinery	2	1
12	Electronic components	2	4
13	Wholesale Metals and Minerals	2	1
14	Transport and storage	2	3
15	Metals and metal products	2	6
16	Aircraft	2	-
17	Stone, Clay, Glass, and Concrete Products	2	-
18	Communications equipment	1	2
19	Construction	1	9
20	Computer Equipment	1	8
21	Wholesale Petroleum and Fuels	1	2
22	Health care services	1	1
23	Electric equipment	1	1
24	Wholesale Durable Goods	1	1
25	Consumer electronics	1	1
26	Tobacco	1	-
27	E-Commerce	1	-
28	Instruments and related products	1	-
29	Textiles, clothing and leather	1	-
30	Real Estate	1	-
31	Rubber and Miscellaneous Plastic Products	1	-
32	Hotels and restaurants	-	3
33	Building materials	-	1
34	Household Appliances	-	1
35	Other Transportation Equipment	-	1

Source: *Compiled by the authors on the basis of UNCTAD 2020, Annex table 19, 20.*

The international competitiveness of enterprises from developing and transition economies is increasing along with the growing level of capital internationalization, as evidenced by the appearance of related brands among the world's highest valued. It is worth noting that in the ranking of the most valuable brands in the world, announced by Brand Finance in the Global 500 report from January 2020; the first

ones include as many as four brands of the world's largest transnational corporations from developing countries (3 from China and 1 from South Korea). Their value in 2020 increased significantly compared to the previous year (Table 6).

Table 6*. 10 most valuable brands in the world in 2019-2020*

No.	Brand name	Country of origin	Industry	Value in 2019 (in billions USD)	Value in 2020 (in billions USD)	Annual change (in %)
1	Amazon	USA	Technology	187.9	220.8	+17.5%
2	Google	USA	Technology	142.8	159.7	+11.9%
3	Apple	USA	Technology	153.6	140.5	-8.5%
4	Microsoft	USA	Technology	119.6	117.1	-2.1%
5	Samsung	South Korea	Technology	91.3	94.5	+3.5%
6	ICBC	China	Banking	91.3	80.8	+1.2%
7	Facebook	USA	Social networking	83.2	79.8	-4.1%
8	Walmart	USA	Retail sales	67.9	77.5	+14.2%
9	Ping an Insurance	China	Insurance	57.6	69	+19.8%
10	Huawei	China	Technology	62.3	65	+4.5%

Source: *Compiled by the authors on the basis of Brand Finance 2020, p. 11.*

5. Conclusion

Statistics showing the FDI outward stock at the end of the second decade of the 21st century show a clear increase in developing countries' share; however, the distance between them about developed countries is still considerable. This is also reflected in the comparison of the 100 largest MNEs worldwide and 100 largest MNEs from developing and transition economies – entities with a significant impact on the scale of global international capital flow in the form of FDI. Moreover, here we can see the convergence of MNEs from developing and transition economies about the largest MNEs worldwide, as evidenced by the presented economic characteristics, for example, the representation of 14 MNEs from developing and transition economies into the 100 largest MNEs worldwide. At the same time, 30 years ago, there was no enterprise in this group.

The convergence is also evidenced by the growing share of MNEs in both groups representing highly technologically advanced industries, although in the 100 largest MNEs from developing and transition economies, it is clearly lower. At the same time, significant differences in the structure by countries both in FDI outward stock and in the largest MNEs of the presented groups persist or intensify. Contrary to the relatively stable structure of FDI outward stock from developed economies, the FDI outward stock from developing and transition economies is marked by far-reaching polarization according to the world's countries, which is reflected in Asia's absolute dominance, including China, Hong Kong, and Taiwan. This is projected on the list of

100 largest MNEs from developing and transition economies. The contemporary world economy, as seen through the prism of the division of countries according to the value of capital employed by their companies abroad, shows a clear picture of the dichotomy. Entities of relatively few countries, which have been joined by several developing and transition economies in the last three decades, have a dominant share in the global FDI outward stock abroad. Simultaneously, it seems important to note that the convergence of the scale of FDI from developing and transition economies to FDI developed economies is mainly the result of significant investment involvement of entities from a small number of developing and transition economies.

Through FDI of state-owned enterprises, some of them directly participate in the process of capital internationalization, providing these enterprises, as part of their economic policy, with protection against competition or by subsidizing foreign expansion. The capital internationalization of the vast majority of developing countries is still very low, which means that, although noticeable, we are not in a position to consider the convergence of the presented groups of countries as a clear process, but rather a phenomenon of which further development will not have a saccadic character. However, since this phenomenon is significant for the world economy, it requires further research.

References:

Andreff, W., Andreff, M. 2017. Multinational companies from transition economies and their outward foreign direct investment. Russian Journal of Economics, 3, 445-474.

Brand Finance, 2020. Global 500. The annual report on the world's most valuable and strongest brands, January.

Carstina, S., Siminica, M., Circiumaru, D., Bandoi, A. 2015. Country Risk Decision-Maker in Applying the Yield Cash-Flow Estimate. International Journal of Economics and Business Administration, 3(1), 79-89, RePEc:ers:ijebaa:v:iii:y:2015:i:1:p:79-89.

Chen, Y., Zhai, R.R., Wang, C., Zhong, C. 2015. Home institutions. Internationalization and firm performance: Evidence from listed Chinese firms. Management Decision, 53(1), 160-178.

Dong, Y., Meng, C., Firth, M., Hou, W. 2014. Ownership structure and risk-taking: Comparative evidence from private and state-controlled banks in China. International Review of Financial Analysis, 36, 120-130.

Gammeltoft, P. 2008. Emerging multinationals: outward FDI from the BRICS countries. International Journal of Technology and Globalization, 4(1), 5-22.

Goldstein, A. 2009. Multinational companies from emerging economies composition, conceptualization & direction in the global economy. The Indian Journal of Industrial Relations, 45(1), 137-147.

Heenan, D.A., Keegan, W.J. 1979. The rise of third world multinationals. Harvard Business Review, 57, 101-109.

Hu, H.W., Cui, L. 2010. Outward foreign direct investment of publicly listed firms from corporate governance perspective, International Business Review, 23(4), 750-760.

Hunning, J.H., Narula, R., Van Hoesel, R. 1998. Third world multinationals revisited: New developments and theoretical implication. In: Dunning, J.H. (ed) Globalization, trade and foreign direct investment, Oxford, Elsevier, 255-286.
Jaworek, M., Kuzel, M. 2015. Transnational Corporations in the World Economy; formation, development and present position. Copernican Journal of Finance & Accounting, 4(1), 55-70.
Karaszewski, W., Jaworek, M., Kuzel, M., Szałucka, M, Szóstek, A. 2014. Foreign Direct Investment by Polish Companies. Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika, Toruń, Poland.
Khan, K. 1987. Multinationals of the South, London, Francis Pinter.
Kumar, K., McLeod, G. 1981. Multinationals from developing countries, Lexington Book.
Lall, S. 1983. The new multinationals: The spread of Third World enterprises. Wiley, New York.
Lecraw, D. 1977. Direct investment by firms from less developed countries. Oxford Economic Paper, 442-457.
Liang, H., Ren, B., Sum, S.L. 2015. An anatomy of state control in the globalization of state-owned enterprises. Journal of International Business Studies, 46(2), 223-240.
Lin, X. 2010. State versus private MNCs from China: Initial Conceptualizations. International Marketing Review, 27(3), 366-380.
Narula, R. 2010. Much ado about nothing or sirens of a brave new world? MNE activity from developing countries and its significance for development. OECD Development Centre.
Ramamurti, R. 2008. What have we learned about EMNEs. In: Ramamurti, R., Singh (eds.) Emerging multinational from emerging markets. Cambridge UK, Cambridge University Press.
Ramasamy, B., Yeung, M., Laforet, S. 2012. China's outward foreign direct investment: Location, choice, and firm ownership. Journal of World Business, 47(1), 17-25.
Thalassinos, I.E. 2007. Trade Regionalization, Exchange Rate Policies and EU-US Economic Cooperation. European Research Studies Journal, 10(1-2), 111-118, DOI: 10.35808/ersj/167.
UNCTAD. 1992. World Investment Report 1992. Transnational corporations as engines of growth, New York.
UNCTAD. 1993. World Investment Report 1993. Transnational corporations and integrated international production, New York and Geneva.
UNCTAD. 2002. World Investment Report 2002. Transnational corporations and export competitiveness, New York and Geneva.
UNCTAD. 2007. World Investment Report 2007. Transnational corporations, extractive industries and development, New York and Geneva.
UNCTAD. 2012. World Investment Report 2012. Towards a new generation of investment policies, New York and Geneva.
UNCTAD. 2019. World Investment Report 2019, Investment and new industrial policies, Geneva.
UNCTAD. 2020. World Investment Report 2020, International production beyond the Pandemic, Geneva.
Wang, F., Liu, J. Su, C. 2017. Outward Foreign direct investment and export performance in China. Canadian Public Policy/Analyse De Politiques, 43(2), 72-87.
Wells, L.T. 1983. Third World multinationals. MIT Press, Cambridge, MA.
Yeung, H.W.C. 1994. Third world multinationals revised: A research critique and future agenda. Third World Quarterly, 15(2), 297-317.